

HDMI 4K Fiber Optic Extender

DVI-7365



DVI-7365-RX HDMI 4K Fiber Optic Receiver, 1x LC

Designed for Extreme Requirements — The DVI-7365 is a highperformance, cost-effective, 4K Multiport Optical Extender designed to meet and exceed even the most demanding system requirements. It supports a wide array of signal types with or without HDCP content protection, provides long-distance extension over a single fiber cable, and supports ultra-high resolutions up to 4K (UHD) at 60Hz (4:4:4).

Multiple Signals Extended over a Single Cable — This multiport optical extender supports uncompressed HDMI 4K /60p, embedded audio, bidirectional IR, RS 232 and two 10/100 BaseT Ethernet ports, using only a single fiber optic cable. It can extend these signals over cable distances of up to 1.86 mi. (3,000 meters). For added versatility, these units provide Advanced EDID Management with four operating modes: Pass-through, Learn 1, Learn 2, and Factory Default.

Fiber Optic Technology — Each extender set consists of an optical transmitter unit and an optical receiver unit. The transmitter converts the AV signals into light pulses for transmission over a single strand of Multi-Mode or Single-Mode fiber optic cable. The receiver converts the light pulses back to AV signals for the display, as well as other downstream devices. By using advanced fiber optic technology, without any compression, this product provides superior picture quality over greater distances than other extension methods, such as copper cables or CAT-X extenders. Together, these features make the DVI-7365 the ideal, cost-effective solution for system designers and integrators who need to support high resolution HDMI signals over extreme distances with flawless image quality.

FEATURES

- Supports resolutions up to 4096x2160 /60p (4:4:4), without using compression
- Extends HDMI, Ethernet (10/100Base-T), RS-232, and bidirectional IR over a single strand of fiber optic cable
- HDCP 1.4 and HDCP 2.2 compliant
- Maximum extension distances: Single-Mode Fiber: > 1.86 miles (~ 3,000 m) OM3 Multi-Mode Fiber: > 1,000 ft. (~ 300 m)
- Four Advanced EDID Management Modes: Pass-through, Learn 1, Learn 2, and Factory Default
- Optical fiber transmission is immune to environmental signal noise
- Low RFI / EMI profile for sensitive applications
- Locking DC power connectors for added security and reliability
- Heavy-duty mounting brackets are included

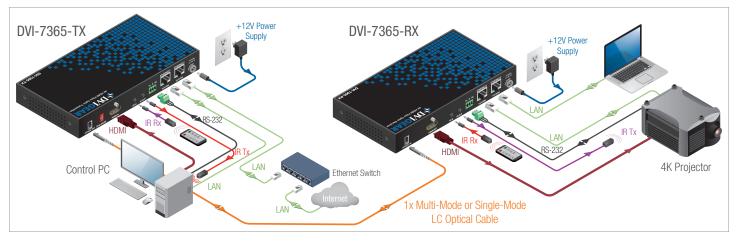
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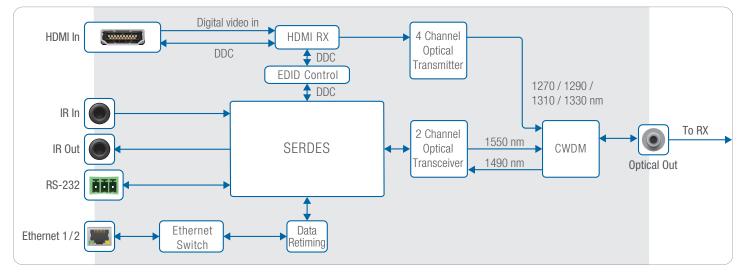


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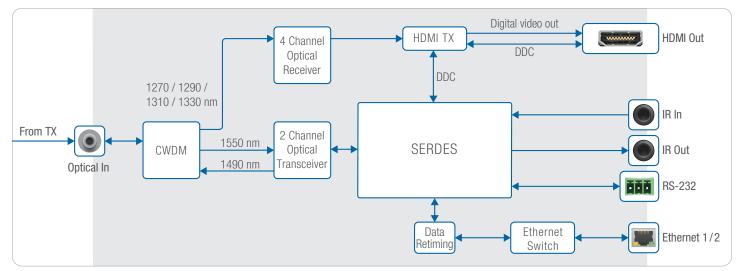
STAND-ALONE DIAGRAM



DVI-7365-TX INTERNAL BLOCK DIAGRAM



DVI-7365-RX INTERNAL BLOCK DIAGRAM



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SPECIFICATIONS

Performance		
Standards Compliance	HDMI 4K /60p, DVI v1.0, HDCP v2.2	
Maximum Pixel Clock Frequency	600 MHz	
Maximum Video Bit Rate	6 Gbps. / 18 Gbps. (Aggregate)	
Total System Jitter (I/O)	0.6 UI maximum	
Inter-Channel Skew	2 nanoseconds maximum	
Ethernet	10/100 BaseT	
Supported Color Depth	Up to 12-bit per pixel	
Supported Resolutions	Up to 4K: 4096 x 2160 /60Hz (4:4:4)	
Digital Audio Support	Embedded HDMI digital audio up to 8-channel (7.1) LPCM, 48 kHz, 24-bit audio capability	
Connections		
HDMI Input / HDMI Output	1 ea. 19-pin Female HDMI connector	
Optical	1 ea. LC fiber optic connector	
Ethernet	2 ea. RJ-45 female connector	
RS-232	1 ea. 3-pin Phoenix connector	
IR Input / IR Output	IR IN: 1 ea. 3.5mm stereo mini-jack; IR OUT: 1 ea. 3.5mm mini-jack	
Power	1 ea. Screw-Locking 2.1 / 5.5 mm female connector	
Control		
TX Unit	Front Panel: EDID Learn button, LEDs for EDID, Power, Optical Link, HPD and Ethernet	
	Back Panel: EDID Mode selection via 2x DIP switches	
RX Unit	LEDs for Power, Optical Link, HPD and Ethernet	
Optical		
Optical Technology	CWDM (Course Wavelength Division Multiplexing) using 6 optical wavelengths	
Laser Diodes	1270/1290/1310/1330nm 10Gbps CWDM DFB Lasers; 1490nm/1550nm 2.5Gb/s CWDM DFB Lasers	
Photo Diodes	1100 – 1620nm PIN Photo Detectors	
WDM Filter	Integrated 1270nm / 1290nm / 1310nm / 1330nm / 1490nm / 1550nm filter	
Optical Wavelengths /	TMDS Signals: 1270nm / 1290nm / 1310nm / 1330nm = 6.0 Gbps.	
Actual Data Rates	DDC, IR, RS-232, Ethernet Signals: 1490nm / 1550nm = 1.25 Gbps.	
Optical Link Power Budget	8.0 dB (minimum)	



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SPECIFICATIONS (CONTINUED)

Cable	
Maximum Cable Length	9/125µ Single-Mode Fiber: > 1.86 miles (~ 3,000 meters)
(typical)	50/125µ 0M3 Multi-Mode Fiber: > 1,000 ft. (~ 300 meters)
DVIGear Fiber Cable	OFNP, Plenum rated – additional data and custom lengths available on request
Cable Jacket	OFNP, Plenum rated, Black PVC Jacket
Cable Outside Diameter	0.2" (4.4 mm)
DDC Support	
EDID Management / Modes	EDID Pass-through (transparent)
	EDID Learn 1 / Learn 2 (cached)
	Factory Default EDID (1080p 2-Ch audio)
HDCP Support	Supports HDMI signals with or without HDCP encryption
Mechanical	
Case Dimensions (H x W x D)	Without Brackets: 1.0" x 7.5" x 3.9" (26.0 x 190.0 x 99.5 mm) Width with Brackets: 8.5" (215.5 mm)
Weight	TX Unit: 568g; RX Unit: 563g
Construction	High-impact metal enclosure with jet black finish
Mounting Options	Mounting Brackets are included
Environmental	
Operating / Storage Temperature	14° to +158° F (-10° to +70°C); -40° to +185° F (-40° to +85°C)
Operating / Storage Humidity	5% to 80% (non-condensing); 5% to 95% (non-condensing)
Power Requirements	
Optical Transmitter / Receiver	Both TX and RX units must be powered by the supplied external power adapters.
External AC Power Adapters	Model No: DVI-7216-PS
	Input: 100-240VAC / 50-60Hz 0.8A; Output: 12VDC, 2.0A
Maximum Power Consumption	DVI-7365-TX: 530 mA (6.4 watts); DVI-7365-RX: 450 mA (5.4 watts)
Regulatory Approvals	
Fiber Optic Extender Unit	FCC Class B, CE, RoHS
Laser	US-FDA CDRH Class 1
External AC Power Adapters	FCC, CE, UL, C-UL, BSMI, CB, CCC, LVD, LPS, PSE, RCM, RoHS, WEEE
Warranty	
Limited Warranty	3 Years Parts and Labor
Model Numbers ⁽¹⁾	
DVI-7365-TX	4K HDMI Fiber Optic Transmitter, 1x LC
DVI-7365-RX	4K HDMI Fiber Optic Receiver 1x LC
DVI-CUST-OPT	Custom Fiber Optic Cable, Plenum rated
	Specify: Length, Fiber Type (MMF, SMF) and Optical Connector (LC)
Accessories Included ⁽¹⁾	Optional Accessories
1x External AC Power Adapter (DVI-7216-	-PS) with USA plug External AC Power Adapter (p.n. DVI-7216-PS) with Euro, UK, or Australia plugs
1x User Guide	+12 VDC Power Distribution Unit (p.n. DVI-7520-PDU)
1x 3-Pin Phoenix Connector (Phoenix p.n.	
1x IR Transmitter (DVI-7360-IR-TX) (ships	s with DVI-7365-TX)
1x IR Receiver (DVI-7361-IR-RX) (ships w	/ITN DVI-7365-KX)
2x Mounting Brackets with Screws	

Note 1: The Transmitter and Receiver units are sold separately. The accessories shown here are included per unit.

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